



# State of Utah

DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

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*Site released  
Surety + Contract  
returned to operator  
7-18-00*

May 1, 1996

TO: Board of Oil, Gas and Mining

THRU: James W. Carter, Director *JWC*

THRU: Lowell P. Braxton, Associate Director and D. Wayne Hedberg, Permit Supervisor *Lowell Braxton*

FROM: Tom Munson, Reclamation Specialist *TM*

RE: Request for Board Approval, Amount and Form of Replacement Reclamation Surety, Ash Grove Cement Company, Navajo Sandstone Quarry, M/023/010, Juab County, Utah

The Division seeks Board approvals of the amount and form of replacement reclamation surety provided by Ash Grove Cement Company for the Navajo Sandstone Quarry, located in Juab County, Utah. The form of surety is a surety bond, issued by St. Paul Fire and Marine Insurance Company for the amount of \$18,100.

Ash Grove Cement Company came before the Board one year ago for approval of a new form of surety. Now, one year later, the company has again obtained a new surety company. When the Division was advised a new surety company was going to be obtained, we prepared an updated surety estimate for the project as the old surety was approaching the time for the five-year review. The new surety has been escalated five years, to the year 2001.

Attached for your review are copies of the following documents:

1. Summary checklist
2. Executive summary
3. Location map
4. Reclamation surety estimate
5. Reclamation Contract (From MR-RC)
6. Surety bond (Attachment B - MR Form 5)

Thank you for your time and consideration of this request.



**DOGM MINERALS PROGRAM**

Checklist for Board Approval  
of  
**FORM AND AMOUNT OF SURETY**

Prepared April 30, 1996

Company Name: Ash Grove Cement Company  
 Mine Name: Navajo Sandstone  
 File No.: M/023/010

Items	Provided		Remarks
	Yes	No	
Executive Summary	X		
Location Map	X		
Reclamation Bond Estimate	X		
Signed Reclamation Contract	X		
Signed Power of Attorney/ Affidavit of Qualification	X		
Bond/Reclamation Surety	X		
Surety Sign Off (Other State/Federal Agencies)		X	N/A with Memorandum of Understanding
RDCC contacted			N/A - Replacement Surety

## EXECUTIVE SUMMARY

Prepared April 30, 1996

Mine Name: Navajo Sandstone Quarry  
Operator: Ash Grove Cement Company  
P. O. Box 51  
Nephi, Utah 84648  
  
Telephone: (801) 857-2313  
Contact Person: Andrew Robinson  
Life of Mine: 20 years

I.D. No: M/023/010  
County: Juab  
New/Existing: Existing  
Mineral Ownership: Operator  
Surface Ownership: BLM  
Lease No.(s): N/A  
Permit Term: 20 years

Legal Description: NE/4 Section 25, Township 13 South, Range 2 West, SLBM, Juab County

Mineral(s) to be Mined: Sandstone

Mining Methods: Surface Mine

Acres to be Disturbed: 8 acres

Present Land Use: Rangeland and mining

Postmining Land Use: Rangeland

**Variances from Reclamation Standards (Rule R647) Granted:** R647-4-7 - Highwall . The Division has granted a variance regarding pit slope requirements of the mining operation. The operator has provided sufficient documentation to justify granting this request. In the event the final configuration and condition of the pit benches and slopes differ significantly from those proposed in the MRP, the Division may require Ash Grove Cement Company to submit further stability analysis to indicate mass stability of the same.

### Soils and Geology:

Soil Description: Loam, 0-6 inches thick, strongly alkaline, with many rock outcrops.

pH: 8.11 - 8.65

Special Handling Problems: Moderate erosion hazard.

Geology Description: Thin topsoil lies directly on top of the Navajo Sandstone outcrop.

**Hydrology:**

**Ground Water Description:** Water table is located below the zone of mining.

**Surface Water Description:** Two ephemeral drainages crossing the mine site form the eastern and western quarry limits. No perennial water is found on the permit area.

**Water Monitoring Plan:** None required. Insignificant impact to water resources anticipated.

**Ecology:**

**Vegetation Type(s); Dominant Species:** Sagebrush, Pinyon, Juniper and limited dryland grasses and forbs.

**Percent Surrounding Vegetative Cover:** Refer to "Remaining condition".

**Wildlife Concerns:** No significant concerns identified.

**Surface Facilities:** None proposed.

**Mining and Reclamation Plan Summary:**     

**During Operations**

1. The operation will disturb 6 acres initially and 3 to 4 additional acres every 5 years. A series of terraced benches 80(H) x 40(V) will be developed. There will be no waste tailing piles, buildings, foundations, sewage or any associated facilities located on the mine site. Anticipated production will be @100,000 tons annually.
2. Proposed disturbance includes: The mine pits, waste dump areas, topsoil storage sites, haul and access roads, surface drainage control structures, and diversions. All proposed disturbance will be located on land leased by the Bureau of Land Management (8 acres total).
3. Topsoil stripping will be accomplished by dozer using a down-slope recovery method. Topsoil storage will be adjacent to the stripped sections. Topsoil stockpiles will be broadcast seeded to minimize erosion.

4. Pit run material will be loaded onto haul trucks and transported to the Leamington Cement Plant where existing mine and mill facilities will be used to process the sandstone which is mined.
5. A revegetation test plot will be established in the spring of 1987 to determine the success of the species selected for final reclamation. The operator has committed to perform a vegetation survey of the immediate area during the spring of 1987 with assistance from the Division.

#### Following Operations

The operator will implement the following reclamation plan upon termination of all mining activities associated with the Navajo Sandstone Quarry:

1. Disturbed areas including roads, pads and benches will be stabilized, regraded, and sloped to conform with the surrounding site topography to the extent practicable.
2. The terraced benches will be covered with 4 - 6 inches of topsoil and seeded with the approved seed mixture. Final overall slope should not exceed 2H:1V.
3. The regraded and topsoiled disturbed areas will be revegetated during the fall season with a seed mix which is best suited to the elevation and climate of the mine site. Standard agronomic practices will be used to prepare the seedbed for drill, broadcast, or hydro-seeding. Appropriate rates of fertilizer and mulch will be applied based upon plant and soil needs.
4. Upon revegetation, fencing will be installed as necessary to insure proper vegetation establishment before grazing resumes. Post-revegetation monitoring will be performed during the liability period.

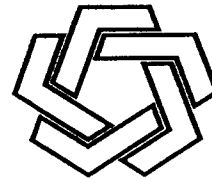
#### Surety:

Amount: \$18,100

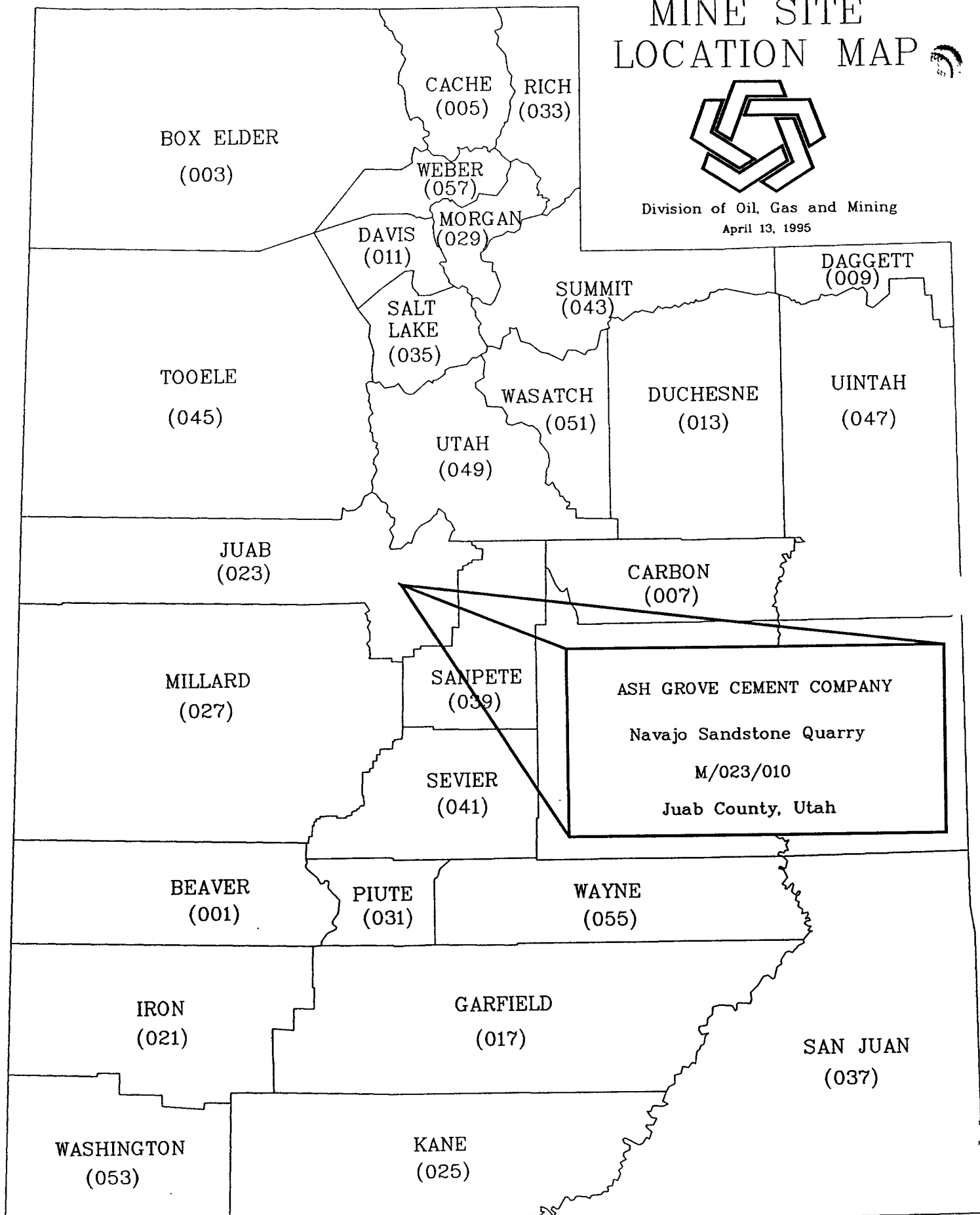
Form: Surety Bond - St. Paul Fire and Marine Insurance Company #400 JS 8014

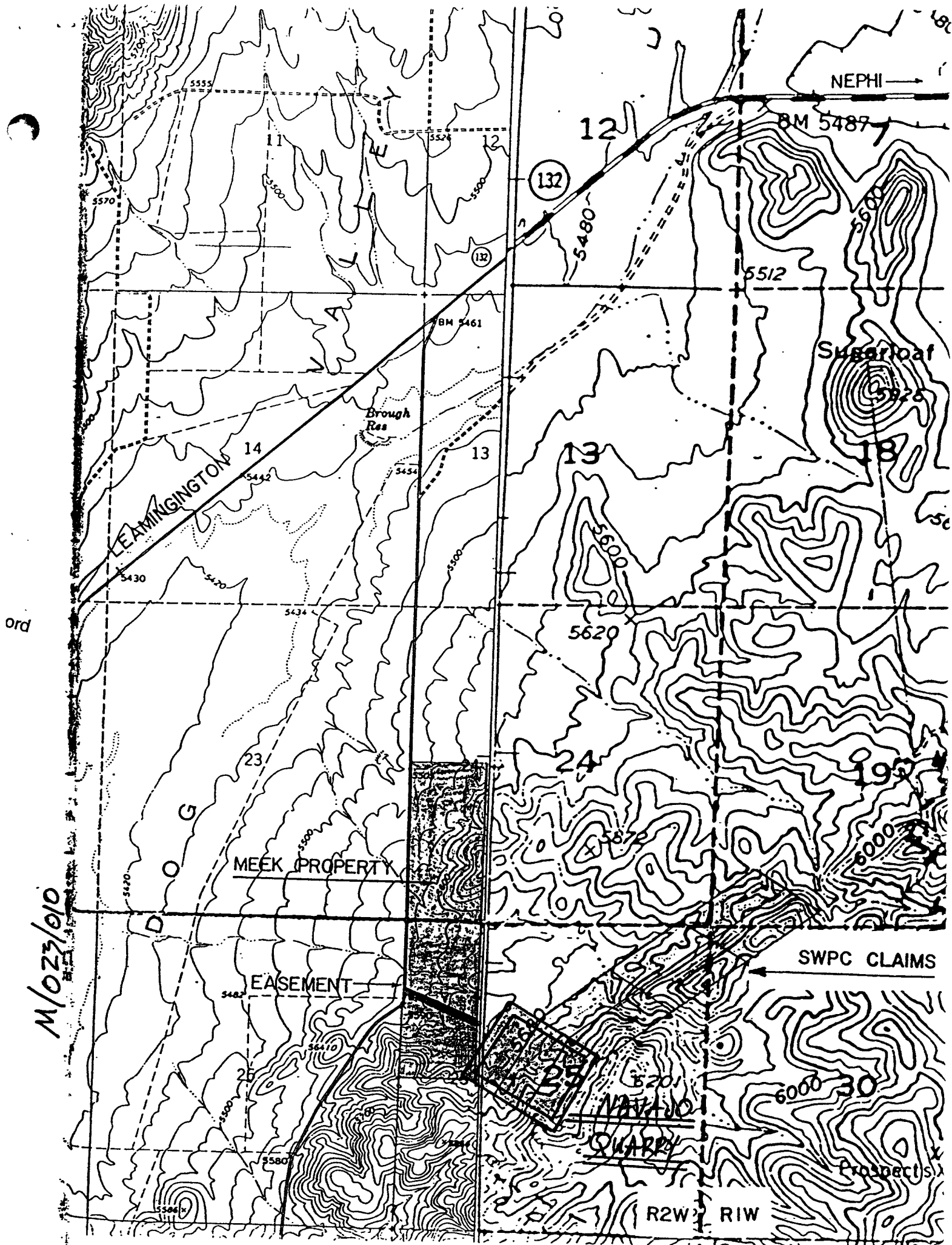
Renewable Term: Year 2001

# MINE SITE LOCATION MAP



Division of Oil, Gas and Mining  
April 13, 1995





# SURETY ESTIMATE UPDATE

Ash Grove Cement Company

Navajo Sandstone Mine

M/023/010

Prepared by Utah Division of Oil, Gas & Mining

filename M23-10UP.WB2

Last Update

03/06/96

Juab County

## Description:

- Original reclamation estimate calculated in 1987 for 18 acres of disturbance
- Original reclamation surety amount posted was \$51,000
- Reclamation estimate was reduced in 1990 to reflect current disturbance
- Base surety amount is \$15,000 (1994-\$) for 8 acres of disturbance
- This update will adjust the surety to present dollars & escalate 5 years into the future
- Escalation factors through 1994 are actual Means Historical Cost Indices
- Actual escalation factor for 1995 is not yet available
- Average of past 3 yrs. actual escalation used to project future escalation
- Total disturbed area = **8 ACRES**

CALCULATIONS	YR	ESCAL FACTOR	BOND AMOUNT
$F = P(1 + i)^n$	1990	0.0077	\$0
F = Future Sum	1991	0.0127	\$0
P = Present Sum	1992	0.0221	\$0
i = Escalation Factor	1993	0.0261	\$0
n = number of periods	1994	0.0321	\$15,000
	1995	0.0268	\$15,402
	1996	0.0268	\$15,815
Three Yr Average = 2.68%	1997	0.0268	\$16,239
Used to Project 5 Yrs	1998	0.0268	\$16,674
Into the Future	1999	0.0268	\$17,121
From the Year 1996	2000	0.0268	\$17,579
	2001	0.0268	\$18,051

**Updated Surety Amount Rounded (2001-\$) \$18,100**

Average cost per acre =

\$2,263